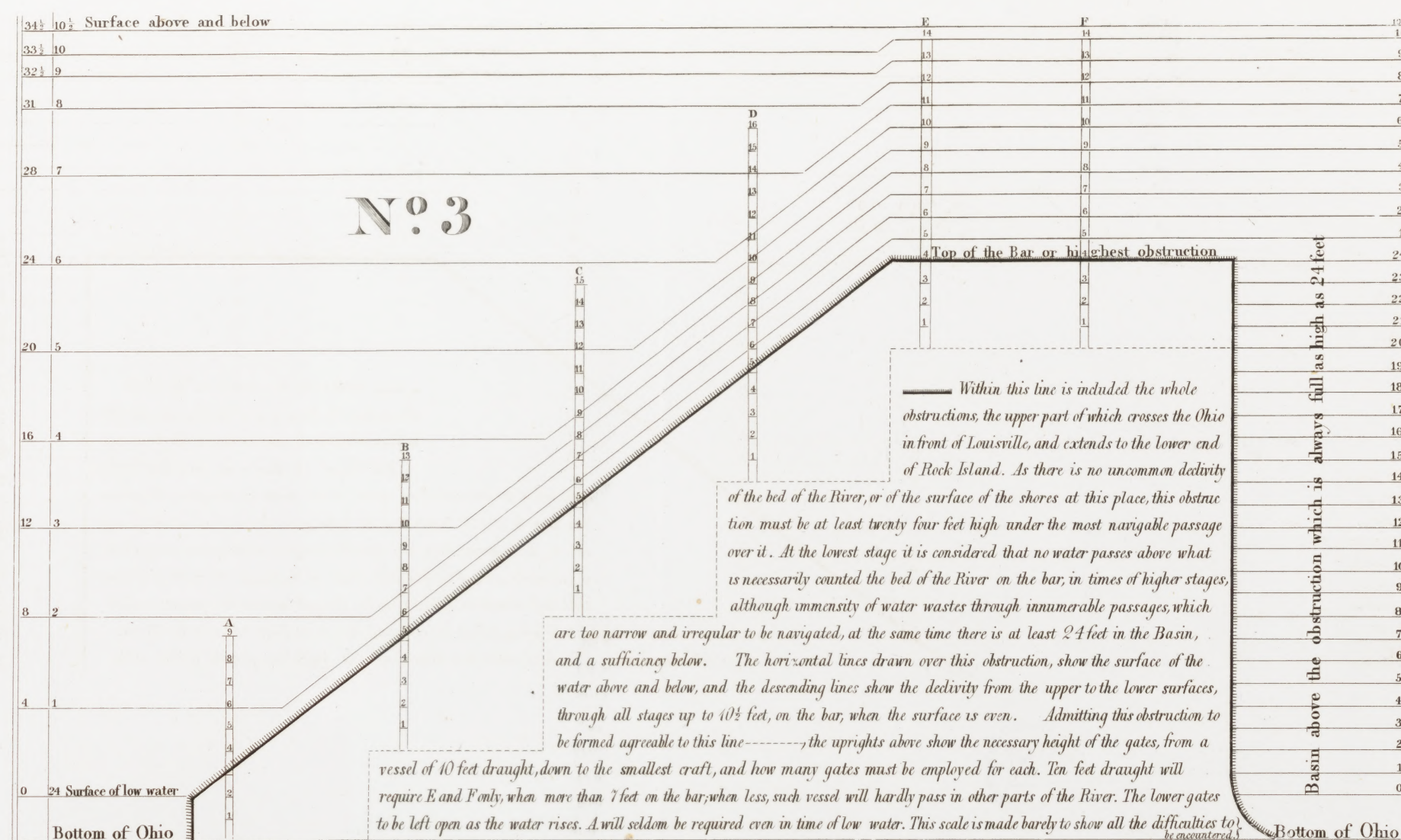
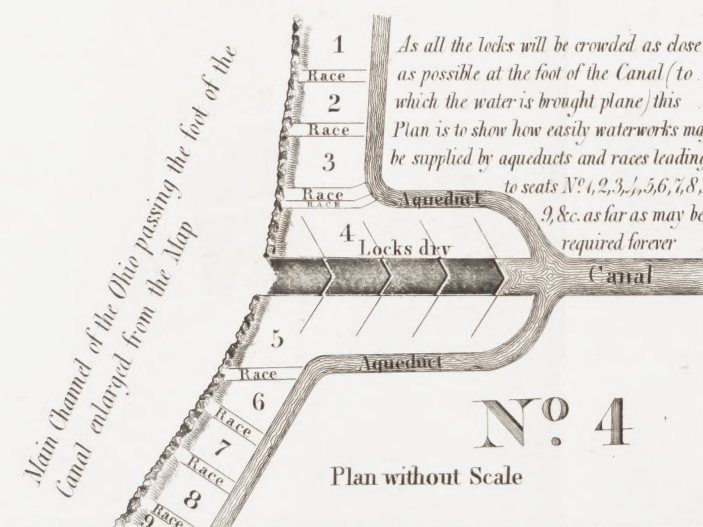
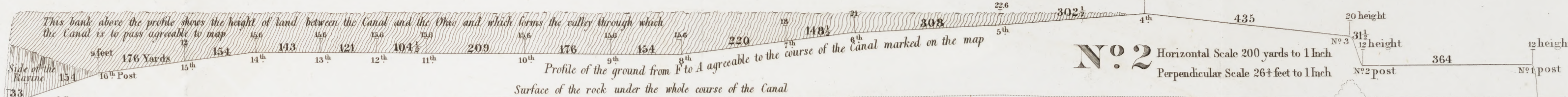


The arrangement agreeable to N<sup>o</sup> 4, will bring all the water works to the best possible site, upon a high and permanent bank, close under which, is the main channel of the Ohio, so that any craft may be alongside and load or unload with the greatest imaginable convenience at all times when such craft can pass elsewhere in the Ohio. When the water swells so as to pass the north side of Sandy Island, and from thence, up to the highest water an eddy is formed in front of Shipping Port, and extends far below A, so that all that shore becomes a safe cover for vessels and boats against ice or drift, and the hole between the lower point of Rock Island, and the ship yard is an excellent harbour in time of lowest water for vessels of any burden.



It has been improperly stated that the preference for a Canal is in favour of the Indiana shore. Congress has been addressed on that subject. A Canal there, should reach from the ravine at K, to the mouth of Mill Creek, in a circuitous route, through a high, uneven country, crossing numerous ravines and creeks. The ground at Patten's well, in Jeffersonville, though not by far the highest, is at least 33 feet high. If the rock extends under the ground at the height it projects from the banks, (and that it does there is no reason to doubt) the mass to be excavated would be immense. A harbour could not be formed at the head or foot, without immense expense. At K the bank is high, & is washed as steep as it will stand over a wide sandy beach. At the foot, the shoals extend so far from the high land, that it would be impossible to keep an open passage to the locks from below.



This level is taken from a point one foot below the surface of the basin at low water at F.

The above profile, taken from a point one foot below the surface of water in basin at E is a statement for the calculation of any person to ascertain the square of the clay and rock to be excavated, minding that the bottom must be 2 feet wide at least to the depth of two feet below the water in the basin, after which it may be curved or shaped to any convenience. The dotted line shows the surface of the rock, and how far it rises above said level. All above the rock is exceeding strong clay, lying upon the rock, except in some places within a few inches of the rock, is a bluish sand mixed with clay. No ravines or watercourses interfere no precarious ground to be encountered. The upper stratum of the rock is about 18 inches of impure limestone, the next foot or more is a soft blue stone, which is easily split off with the pick. Below that, for many feet is blue rock, concreted of various materials, the principal of which, appears to have been extremely fine blue clay. This rock is easily excavated and affords excellent stone for walling, as it is known that canals in this climate require walling to a certain height to which the rock does not rise. It is understood that the stone which may be easily raised along this canal, will exactly or very nearly answer that purpose, and leave a permanent foundation through the whole canal and locks; the sluices of which may be curved or shaped to the mind of the projector. The prominent height that appears on the profile of the rock under level post N<sup>o</sup> 2 and 3 is a point of rock which projects to the river bank from under the high land which appears on the map, nearly under line of the west end of Louisville. Rather than rock, this point resembles black slate. It is well placed there, as a support to an upper Guard if necessary.

J. Brooks.